Learning Together About Using Higher-Order Questions to Help Students Build Explanations

Purpose	Trainers, coaches, and expert teachers are encouraged to use this tool to provide in-service training on strategies for using higher-order questions to help students build explanations.
Materials	Laptop and projector
Media	*Using Higher-Order Questions to Help Students Build Explanations.* Watch this multimedia presentation to learn about how higher-order questions that prompt student explanations improve learning and comprehension. (6:40) *Key Concepts in Using Higher-Order Questions*. Watch this expert interview with Dr. Annemarie Sullivan Palincsar to learn about how teachers can use higher-order questions to elicit student explanations. (6:34)
Topic	How to Organize Your Teaching
Practice	Higher-Order Questions

Learning Together About Using Higher-Order Questions

During this session, teachers will work in the larger group and in small groups to deepen their understanding of instructional strategies and practices.

1. Hand out the bulleted discussion questions below. Watch the multimedia presentation, *Using Higher-Order Questions to Help Students Build Explanations* and the expert interview, *Key Concepts in Using Higher- Order Questions*. Lead a discussion to clarify the team's understanding about asking higher-order questions by asking them to reflect on these questions:

    - What is a higher-order question?
    - What are some examples of higher-order questions that elicit student explanations from your own curricula?
    - How does asking higher-order questions and eliciting explanations improve students' learning?
    - What are some features of learning environments that support higher-order questions and explanations?
    - What are some different ways teachers can elicit explanations in class activities or homework assignments?

2. Discuss as a group: What can teachers do to create a classroom environment that supports inquiry and explanation?

    Note to leader: discussion topics may include the following:

    - Developing effective unit or essential questions across grade levels
    - Considering the benefits and limitations of various participation structures that support student questioning and explanation (e.g., whole class, small group, pair work)
    - Evaluating student explanations
    - Leading effective whole class discussions
    - Organizing and facilitating cooperative groups
    - Designing homework assignments around explanations
    - Implementing inquiry-based learning
    - Establishing classroom norms for discussions

3. Ask teachers to think about and write notes and then discuss in small groups:

    - Brainstorm all the places students create explanations in your curriculum
    - Consider what counts for a quality explanation in your discipline and what criteria you use to evaluate those explanations
    - Consider where in your curriculum you could encourage more explanation

4. Have teachers bring students' written explanations from their classrooms and discuss in small groups the qualities and characteristics of a good explanation.